

Goat anti-PROM1 / CD133 Antibody

Peptide-affinity purified goat antibody

Catalog # AF4519a

Product Information

Application	IF, Pep-ELISA
Primary Accession	O43490
Other Accession	NP_006008.1 , NP_001139319.1 , NP_001139324.1 , NP_001139323.1 , NP_001139322.1 , NP_001139321.1
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Clone Names	PROM1
Calculated MW	97202

Additional Information

Gene ID	8842
Other Names	PROM1; prominin 1; AC133; CD133; CORD12; MCDR2; PROML1; RP41; STGD4; OTTHUMP00000217744; OTTHUMP00000217745; OTTHUMP00000217746; antigen AC133; hProminin; hematopoietic stem cell antigen; prominin-1; prominin-like 1; prominin-like protein 1
Dilution	IF~~1:50~200 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
Immunogen	This antibody is expected to recognize all reported isoforms (NP_006008.1; NP_001139319.1; NP_001139324.1; NP_001139323.1; NP_001139322.1; NP_001139321.1). Reported variants represent identical protein: NP_001139320.1, NP_001139319.1
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat anti-PROM1 / CD133 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PROM1
Synonyms	PROML1

Function	May play a role in cell differentiation, proliferation and apoptosis (PubMed: 24556617). Binds cholesterol in cholesterol- containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner (PubMed: 20818439).
Cellular Location	Apical cell membrane; Multi-pass membrane protein. Cell projection, microvillus membrane; Multi-pass membrane protein. Cell projection, cilium, photoreceptor outer segment Endoplasmic reticulum. Endoplasmic reticulum-Golgi intermediate compartment. Note=Found in extracellular membrane particles in various body fluids such as cerebrospinal fluid, saliva, seminal fluid and urine
Tissue Location	Isoform 1 is selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Isoform 1 is not detected on other blood cells. Isoform 1 is also expressed in a number of non-lymphoid tissues including retina, pancreas, placenta, kidney, liver, lung, brain and heart. Found in saliva within small membrane particles. Isoform 2 is predominantly expressed in fetal liver, skeletal muscle, kidney, and heart as well as adult pancreas, kidney, liver, lung, and placenta. Isoform 2 is highly expressed in fetal liver, low in bone marrow, and barely detectable in peripheral blood Isoform 2 is expressed on hematopoietic stem cells and in epidermal basal cells (at protein level). Expressed in adult retina by rod and cone photoreceptor cells (at protein level)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.